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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/313,299 05/17/99 LEE

J P0963R1D1

EXAMINER
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HM12/0727

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SOUTH SAN FRANCISCO CA 94080-4990

MURPHY, T	
ART UNIT	PAPER NUMBER

1646

DATE MAILED:

07/27/01

16

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/313,299

Applicant(s)

LEE ET AL.

Examiner

Joseph F Murphy

Art Unit

1646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 37-64 is/are pending in the application.
- 4a) Of the above claim(s) 37-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **DETAILED ACTION**

### ***Formal Matters***

Claims 37-64 are pending. Claims 37-39 stand withdrawn from consideration pursuant to 37 CFR 1.142(b). Claims 40-64 are under consideration.

### ***Response to Amendment***

The rejection of claims 40-64 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, has been withdrawn based on Applicant's presentation of written support for the invention as now claimed: an amino acid sequence comprising the amino acid residues 21-49, 1 to 49, 21-157, 1-157, 21-419 of SEQ ID NO: 3.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 40-57 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claims 40-49 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the result of the method of contacting the cell with a polypeptide comprising amino acids 21-49 of SEQ ID NO: 3.

Claims 50-57 are vague and indefinite in the use of the term "dysfunctional state". The term "dysfunctional state" is defined in the specification (page 16, lines 6-11) as referring to diseases that would be beneficially treated by providing VRP or VRP receptor agonist to a mammal. This does not define the pathological conditions which would be alleviated by administration of a polypeptide comprising various polypeptides of SEQ ID NO: 3.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 40-64 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5932540 (Hu et al.).

U.S. Patent No. 5932540 discloses polynucleotides encoding full length or truncated VEGF2 polypeptides having the amino acid sequences shown in SEQ ID NO: 2 (claim 1). The polypeptide of SEQ ID NO: 2 disclosed in the '540 patent comprises the polypeptide of SEQ ID

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NO: 3 amino acids 21-49 (see Sequence Comparison A, attached). Also disclosed are methods of administration of the isolated polypeptide comprising a mature portion of a protein consisting of the amino acid sequence of SEQ ID NO: 2 (claim 61). Also disclosed are methods of using the polypeptides in vitro (column 3, lines 42-47). The methods disclosed in the '540 patent to administer polypeptides use identical products to the methods claimed in the instant application, therefore it is an inherent property of the methods disclosed in the '540 patent to stimulate tyrosine phosphorylation of flt4, and the claims are anticipated.

***Conclusion***

No claim is allowed.

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***Advisory Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph F. Murphy whose telephone number is 703-305-7245.

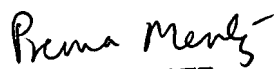
The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 703-308-6564. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-308-0294 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



Joseph F. Murphy, Ph. D.  
Patent Examiner  
Art Unit 1646  
July 26, 2001

  
PREMA MERTZ  
PRIMARY EXAMINER

Sequence Comparison A  
SEQ ID NO: 3 amino acids 21-49

PN US5932540-A.  
XX  
PD 03-AUG-1999.  
XX 40-64  
PF 24-DEC-1997; 97US-0999811.  
XX  
PR 24-DEC-1997; 97US-0999811.  
PR 08-MAR-1994; 94US-0207550.  
PR 06-JUN-1995; 95US-0465968.  
XX  
PA (HUMA-) HUMAN GENOME SCI INC.  
XX  
PI Cao L, Hu J, Rosen CA;  
XX  
DR WPI; 1999-443606/37.  
DR N-PSDB; X84837.  
XX  
PT Vascular endothelial growth factor 2 for wound healing and vascular  
PT repair  
XX  
PS Claim 1; Fig 1; 49pp; English.  
XX  
CC This sequence is the vascular endothelial growth factor 2 (VEGF2),  
CC of the invention. The isolated polypeptide is useful for stimulating  
CC angiogenesis, by promoting the proliferation of endothelial cells, for  
CC the treatment of a wound, or for the treatment of tissue or bone damage.  
XX  
SQ Sequence 419 AA;

Query Match 100.0%; Score 145; DB 20; Length 419;  
Best Local Similarity 100.0%; Pred. No. 1.2e-13;  
Matches 29; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GPREAPAAAAAFESGLDLSDAEPDAGEAT 29  
|||||  
Db 21 gpreapaaaaafesgldlsdaepdageat 49